Develop (1954) Department.

Ms. SERIES.

G.O. No. 4637

Dated 11-9-1948

[Despatch Abstract.]

Agriculture - Scheme of Research of measurement of draught and harnessing of animals - forwarded

Development Department.

Letter No.Ms.4637 Dated 11-9-1948.

To

The Secretary to the Indian Council of Agricultural Research, New Delhi.

Sir,

Sub: Agriculture - Scheme of Research of measurement of draught and equipment and harnessing of animals - Forwarded.

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I am directed to invite a reference to your letter No.F.12(II)/44 A.H. dated 10th April 1946 in which the recommendations of Dr. R.W.Phillips on the development of Animal Husbandry in India were commended to this Government. With reference to the recommendation that attention should be given to the equipment that is used for all types of work animals, the Director of Agriculture Madras submitted a scheme of research for the measurement of draught and equipment and harnessing of work animals.

2. I am to forward herewith a copy of the scheme mentioned above for the information of the Indian Council of Agricultural Research. The scheme has been sanctioned in anticipation of the approval of the Indian Council of Agricultural Research in view of the fact that the scheme has a bearing on food production and in view of the existing shortage of cattle and high cost of feeding stuffs. A Copy of this Government's proceedings No.1968 Development dated 20-4-1948 sanctioning the scheme is enclosed. The scheme is estimated to cost Rs. 6,764/- recurring for one year and Rs.400-0--0 non-recurring. It isproposed that the recurring ~~exp~~ expenditure may be shared equally between the Incian Council of Agricultural Research and the Provincial Government and the entire non-recurring expenditure will be borne by this Government.

3. I am to request that the sanction of the Indian Council of Agricultural Research to the scheme may kindly be ontained and communicated to this Government at an early date.

Yours faithfully,

ANNEXURE.

"SCHEME OF RESEARCH OF MEASUREMENT OF DRAUGHT AND EQUIPMENT AND HARNESSING OF ANIMALS"

(1) PREVIOUS WORK DONE. The Agricultural Research Engineer Coimbatore has designed a set of harness made of leather with iron rings and buckles to enable it to be adopted for fitting on work animals. This harness was found to be suitable in distributing load on the animal and is simple in construction and easy to attach and detach from the animals. Much work has to be carried out to design harness to suit various types of work done by bullocks.

(2) OBJECT: he present system of yoking animals for work is done without any regard to obtaining the maximum efficiency. The entire load coming on the neckand hump strain the muscles of these parts excessively while the muscles of the shoulder and neck are hardly called into play. Hence it is necessary to consider the possibility of devising some form of harness which will be capable of distributing the load over the various muscles of the body of the animal in such a way as to enable the animal to do the ~~maximum~~

maximum amount of useful work with the minimum amount of strain.

(iii) PRAGRAMME OF WORK:

1. Designing and manufacturing harness for single bullock.carts.

2. Designing and manufacturing harness for double bullock carts.

3. Designing and manufacturing harness for ploughing teams.

4. Designing and manufacturing harness for mounting teams .

5. Desing of multi-purpose harness.

6. Measurement of efficiency of harness as compared to the rope attachments.

STAFF:

The research Engineer will carry out the work wi the assistance of a Supervisor.

(v) CAPITAL OUTLAY:

It is proposed to purchase a Dynamometer to measure the efficiency of work with the harness, and compar it with the use of existing rope attachment.

(iv) TENURE OF SCHEME: It is proposed to run the scheme fo one year.

(~~x~~ vii) FINANCIAL IMPLICATION:

BUDGET PROVISION

ANNEXURE.

A. Recurring Expenditure

1. Establishment.	Cost for one year. Rs
Pay of one Supervisor on Rs.150 in the scale of pay of Rs.100-5-150-10-250.	1,800
Dearness allowance @ Rs.35/- p.m.	420

2- Contingencies.	Cost for one year.
Wages of three Cobblers. At Rs.45/8/-p.m.	546 x 3 = 1638.
Wages of one Blacksmith at Rs.45-8-0 per mensem.	546.
Wages of four coolies at Rs.1 each per day (Provided for 3 months only)	360
	2544

Cont.

3. Leather, twine, wax Iron and Steel for Chains etc. Lump sum.	Rs.2000
Recurring Expenditure Grant Total of items 1,2, and 3	Rs.6764

B. Non-recurring expenditure.

Equipment and Dynometer	Rs.3000
Leather working tools Blacksmith's forge and tools.	Rs.1000
	Rs.4000

ABSTRACT.

Recurring 6764	
Non-recurring.....4000	
Total.	10764

;opy to the Director of Agriculture.
ie is requested to submit necessary printed copies of the schme for forwarding to the Indian Council of Agricultural Research at an early date.

/True copy/

for Superintendent,
Madras Record Office.

NG.29.

10-8.